

ABSTRACT OF THE DISCLOSURE

Disclosed is a compiler apparatus for generating an instruction code composed of instruction sets each including
5 an instruction that designates an m -bit immediate value indicating a location of a data item in a memory area. The compiler apparatus sequentially selects, based on one data attribute, a data item from a group X composed of a plurality of data items; and judges, each time a data item is selected,
10 whether the selected data item is allocatable to an n -byte memory area ($n \leq 2^m$). When the judgment is negative, the compiler apparatus specifies, based on a different data attribute, a data item out of all the selected data items and exclude the specified data item from the group X , and repeats the selection until all
15 the data items remaining in the group X after excluding all the specified data items are judged to be allocatable to the memory area.